

REMARKS

Claims 1-28 are pending. Claims 1-6 and 9-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the instant application's disclosed prior art in view of Watanabe (U.S. Pat. No. 6,044,104). Claims 7-8 are objected to.

Claim 1 recites "A wireless receiver, comprising: . . . circuitry for correlating a primary synchronization code across a group of the plurality of symbols; *circuitry for identifying a plurality of path positions within the group, wherein each of the plurality of path positions corresponds to a respective one of a plurality of largest-amplitude paths represented within the group* as detected in response to the circuitry for correlating; *circuitry for defining a plurality of sub-windows within one of the plurality of time slots*; wherein each of the plurality of sub-windows comprises a plurality of sample positions; and *wherein each of the plurality of sub-windows includes at least one of the plurality of identified path positions*; and circuitry for combining paths selected from the sample positions within the plurality of sub-windows." Claim 24 recites "A method of operating a wireless receiver, comprising the steps of: . . . correlating a primary synchronization code across a group of the plurality of symbols; *identifying a plurality of path positions within the group, wherein each of the plurality of path positions corresponds to a respective one of a plurality of largest-amplitude paths represented within the group* as detected in response to the circuitry for correlating; *defining a plurality of sub-windows within one of the plurality of time slots*; wherein each of the plurality of sub-windows comprises a plurality of sample positions; and *wherein each of the plurality of sub-windows includes at least one of the plurality of identified path positions*; and combining paths selected from the sample positions within the plurality of sub-windows." (emphasis added).

Neither applicant's admitted prior art nor Watanabe disclose "identifying a plurality of path positions within the group, wherein each of the plurality of path positions corresponds to a respective one of a plurality of largest-amplitude paths represented within the group" as required by claims 1-28. This initial acquisition of path positions is performed by searcher 52 (Figure 4) as described at page 11, lines 11-15. Each of the path positions corresponds to a largest-amplitude path

within the group. These largest-amplitude paths are shown as P_{1-4} at Figure 6 and described page 16, lines 8-11. Claims 1-28 further require "defining a plurality of sub-windows . . . wherein each of the plurality of sub-windows includes at least one of the plurality of identified path positions." This is illustrated at Figure 6 as sub-windows 92₁-92₄ and described in detail at page 16, lines 15-26 of the instant specification.


Neither applicant's admitted prior art nor Watanabe disclose these limitations. Watanabe discloses a plurality of search windows that are assigned to N correlators 3 (Figure 1) as described at col. 4, lines 8-14. Therein, Watanabe teaches that the search window width is received from a base station and divided into N windows. Watanabe fails to teach or suggest that these search windows fall within one time slot as required by claims 1-28. Moreover, Watanabe fails to teach or suggest that each of the N divided windows of Figure 2 correspond to at least one of the plurality of identified path positions as required by claims 1-28. Referring to Figure 2 of Watanabe, it is obvious that only one of the N divided windows corresponding to the 3RD correlator includes a pilot code phase. This is an unavoidable result, since Watanabe fails to teach or suggest identifying a plurality of path positions within the group as required by claims 1-28. Watanabe simply divides the entire search window width into N parts corresponding to N correlators without regard to what might be in each part. This failure to identify path positions also requires Watanabe to search the entire search window width of Figure 2.

By way of comparison, Figure 6 of the present invention discloses identified path positions P_{1-4} and corresponding sub-windows 90₁₋₄ within search window 80. Each of the sub-windows includes at least one of the plurality of identified path positions P_{1-4} as required by claims 1-28. The present invention, therefore, permits a cell search over a relatively small part of search window 80. Advantages of the present invention are compared to the prior art at page 19, lines 1-24. Therein, a preferred embodiment of the present invention details a 97% reduction in computational complexity. No combination of applicant's admitted prior art and Watanabe teach or suggest the foregoing limitations or their advantages as required for *prima facie* obviousness. Thus, applicant

respectfully submits that claims 1-28 are patentable over applicant's admitted prior art in view of Watanabe under 35 U.S.C. § 103(a).

In view of the foregoing, applicant respectfully requests reconsideration and allowance of claims 1-28. If the Examiner finds any issue that is unresolved, please call applicant's attorney by dialing the telephone number printed below.

Respectfully submitted,



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